

## **TIMELINE – International Physics Tournament 2024**

**October 30<sup>th</sup>, 2023** - **Registration deadline** for the 2024 tournament.

Each team/local mentor will receive the contact details of the assigned Weizmann physics consultant.

**November 2023** – **Safe concept form submission**, using the safe idea form on the webpage (in the **Additional Links**).

local mentor/teacher will go over the initial safe concept and make sure it complies with the tournaments' criteria and regulations. The teams will receive the mentor's feedback and discuss the idea.

local mentors are then required to go over their team's safe concept with the Weizmann consultant to receive the final approval of the idea before the team begins to build a prototype for the locking mechanism.

**December 2023** – **Video of the locking mechanism submission**

local mentor/teacher will present the team's video of the locking mechanism to the Weizmann consultant. Mentors will demonstrate the team's progress and the functionality of the safe to the Weizmann consultant, while discussing **safety issues**, as well as the **physics riddles** (up to 2 riddles only).

**January 2024** – **Teams begin to build the "box" of the safe**, in which the locking mechanism will be inserted in.

Local teachers / Mentors will update the Weizmann consultant and discuss the progress of the teams, including videos, photos, and documents, to receive the approval of the consultant.

**February 2024** - Teams continue to build and design the safe with the locking mechanism inside.

**March 1<sup>st</sup>-10<sup>th</sup>, 2024** - Final approval of the built and designed safe – each team will set up a zoom meeting with the Weizmann consultant and present their working functional safe (the finished project).

To receive the final approval for the safe the following steps are required:

Preparing a safe description - for the **judges** and the tournament **website**:

Up to 2 pages, readable and clear.

- Presenting the team: members' names, school, grade, city, and country.
- Presenting the safe.
- A Sketch of the safe.
- A Photo of the final safe.
- A brief presentation of the physics principles applied in the safe, (use students' own words not a copy from Wikipedia or textbooks).
- An interesting and creative presentation of the idea behind the riddles, explaining how to solve the riddles.

Preparing a short video - for the **judges** and for the **video competition** (open to the public on Davidson's YouTube channel (the videos will be uploaded to the tournament's webpage, right after the tournament ends). Each team will email a short video.

The criteria:

- Up to 2 min long

- Wide shot, well-lighted location, clean and noise free background, avoid shaky footage.
- Video should be clean of any watermarks.
- Presentation of the safe while avoiding the appearance of students' faces.
- Explanation and demonstration of the safe's story riddles and fluency of operation.
- Presentation of the physics principles to non-physics literates.

Preparing instruction - for the **burglars** (the crackers):

Presenting the story of the safe and the riddles, on one page only.

Clear instructions, all actions that can and cannot be done during the break-in, without revealing the break-in methods themselves.

**All materials need to be emailed to the Weizmann consultant and receive his final approval.**

**April 2<sup>nd</sup>-3<sup>rd</sup>, 2024** - The 2024 International physics tournament at the Weizmann institute.